

VI. *Additional notes on Bombyces collected in Chili by Mr. Edmonds.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Read March 1st, 1882.]

It will be noticed that in my account of the Bombyces collected in Chili by Mr. Edmonds, reference has been made to descriptions of several larvæ sent to me, but which I could not find among the notes in my hands (*antea*, pp. 18 and 20).

In looking over supplementary notes upon the butterflies received from Mr. Edmonds, I was surprised to find these descriptions; they are written (in pencil for the most part) upon letter paper, and had been placed with various letters received and answered, which must be my excuse for overlooking them, though it is, I admit, but a lame one at best.

As fresh material has been received from Chili since the reading of my paper, and has come into my hands within the last few days, I think the best thing to do is to describe the new forms, giving at the same time the notes on species already enumerated; I much regret that such a course should be necessary, but it seems decidedly preferable to omitting valuable information which must prove useful to future collectors.

22. *Ormiscodes crinita*, Blanch.

“*Larva*.—Black, with interrupted transverse bands of yellow, and clothed with long brown bushy prickles and short grey hairs; head shining black, thinly clothed with short grey hairs; body velvety black, variegated with orange, brown, and yellow; the yellow markings forming transverse bands, irregularly spotted with black on the front part of each segment except the second; immediately behind the yellow band on each segment there are six bushy spines, two on the back and two on each side, of a dark brown colour, except the extreme points, which are grey and very sharp. The spines on

the second segment are directed forwards, and those on the anal segment backwards; the back part of each segment is ornamented with small orange-brown spots, and three patches of short grey hairs, one patch on the back and one on each side; prolegs and claspers dark reddish brown, thinly clothed with short grey hairs; under side dull black. The spines sting severely when touched. Feeds in July, August, and September on 'Quilo' (*Muhlenbeckia sagittifolia*), and also on poplar, pepper, rose, and a number of other trees and shrubs.

"Pupa.—Dull black, and enclosed in a loose cocoon, sometimes placed among dead leaves or rubbish on the surface of the earth. The perfect insect appears in January and February."—*T. E.*

The following description must, I think, refer to—

26. *Cinommata bistrigata*, Butl.

"Larva of ? *Hyperchiria* sp.*—Length $1\frac{1}{4}$ inches; thinly clothed with fine hairs; head yellowish white, with a narrow black streak running from the back across the face, forked at the end nearest the mouth, and a black streak on each side of the face; body dull grey, with a double dorsal line and broad subdorsal line dirty yellowish white; the former lines interrupted on the third and fourth segments by large black patches, and the subdorsal lines of a dull orange colour on the hind segments; a broad spiracular line white, with a fine horizontal crimson dash on each segment, and bounded above and below by a narrow black line; each segment furnished with six tufts of sharp-pointed bristles, colour very pale brown, with the extreme tips black, length rather less than a line; two subdorsal, two lateral, and two below the spiracles; a small smooth spine about 1-16th of an inch long, soft, and of a bright red colour, springs from the white spiracular line on each side of the fifth segment; spiracles white, edged with light brown; under side dirty yellowish white, often tinged with green; legs and claspers very pale brown. Feeds on 'Coligne' (*Chusquea cummingii*); full-fed beginning to middle of December; obtained when young by beating."—*T. E.*

* The number is omitted, and therefore for the present the identification must remain doubtful.

27. *Cercophora frauenfeldi*, Feld.

“*Larva*.—Head whitish green, with a few very fine short black hairs; second segment pale green, slightly larger than the head, with a few very fine black hairs springing from the front edge and directed forwards; one of these hairs on each side is slightly longer than the rest, and thickened at the tip; the third segment is larger than the second, and has an oval pinkish white spot margined with a fine black line on the back; the fourth segment is much larger than the third, and forms a high peak on the back; this peak is green, thickly dusted with yellow, and directed forwards; immediately in front of the peak there is a spot similar to that on the third segment, but smaller; both the third and fourth segments have some extremely fine silky hairs on each side, and one on each side of each segment is thickened at the tip; from the tip of the peak on each side a raised yellow line runs along the body above the spiracles, ending in a sharp yellow tail-like point at the extremity of the twelfth segment; the rest of the body is pale green, dusted with yellow, inclining to whitish green on the back; the fifth and sixth segments have pinkish spots on the back, and on each segment there is a small black spot, above and adjoining the lateral line, from which a long fine black hair, thickened at the tip, is emitted; prolegs and claspers pale green, and thinly clothed with very short downy hairs of a pale green colour; the body slopes gradually from the peak on the fourth segment, and terminates in a sharp point. This larva is very sluggish in its habits, and clings tightly to the food-plant; when at rest the head is almost hidden by the second segment, and the second and third segments are contracted and held downwards nearly at right angles to the peak on the fourth segment.”—*T. E.*

I have introduced this description as being far more minute than my own, which was necessarily taken from the drawing. (See Pl. I., fig. 5).

29. *Eudelia venusta*, Walk.

“*Larva*.—Similar to that of *C. frauenfeldi*, but differs in its larger size, in having the raised line, which runs from the peak on the fourth segment, pale blue on the

top and white beneath, or in front, on that segment, instead of being entirely yellow, as in *C. frauenfeldi*; in having the said line interrupted or replaced on the sides of fifth segment by short treble lines, the top one blue, the middle one black, and the under one orange, and in having the rest of the lateral line pale yellow on top and rose-colour under; in wanting the reddish spots on the backs of the third, fourth, fifth, and sixth segments, and in having a dorsal line of a paler green than the rest of body. Feeds on 'Maiten' (*Maitenus chilensis*).

"*Cocoon*.—Differs from *C. frauenfeldi* in being slightly pear-shaped instead of oval, and is grey instead of yellowish; the larva spun up on August 15th."—*T. E.*

31A. *Polythysana albescens*.

"*Larva*.—Length rather over three inches; head smaller than second segment, greenish, with black markings; colour beneath pale green; above ashy, with a pinkish tinge; a large velvety-black patch on the back of second and third segments, visible only when the larva is walking; body covered with short isolated stiffish hairs; the second, third, and fourth segments have in addition eight bipectinate spines, two on each side, and four on the back of each segment, those on the second segment about three lines long, those on the third and fourth about one line long, and also directed forwards; the primary spines are reddish or pink, the pectinations are generally thick at the base, black and yellow, then they terminate abruptly in a slender whitish hair; the sixth to eleventh segments inclusive are furnished each with four stellate bunches of spines, each of from ten to fourteen prickles, yellow at base, black at tip; the central prickles having more black on them than the peripheral ones; these stellate prickles are situated at equal distances from each other in a line between the two spiracles of each segment; the twelfth and thirteenth segments have but three bunches each; beneath each spiracle the fifth, sixth, eleventh, and twelfth each have two long bipectinate spines, like those on the thoracic segments; the other segments have one each in the same place (when the larva is at rest these are closely applied to the leaf or twig on which it rests); spiracles small, whitish yellow, with a slender black

edge. Full-fed about the end of October or beginning of November.

"*Pupa*.—Enclosed in a pear-shaped cocoon of buff-coloured silk, open at one end (*Saturnia*-like), spun among the leaves of the food-plant."—*T. E.*

A pen-and-ink sketch by Mr. Edmonds represents the bipectinated spines as deflexed on each side of the body like the hairs on some other larvæ.

35. *Hyperchiria erythrops*, Blanch.

"*Larva*.—Dull brown, clothed with prickly spines: head dark brown and shiny; body dull greyish brown, with indistinct subdorsal and lateral lines of dirty white colour, and irregular pale dull orange lines immediately above and below the spiracles; the latter pale dull orange, edged with black; under side and claspers greenish grey; prolegs brown; each segment armed with six tufts of sharp prickles of a light brown colour, the extreme tips dark brown; these sting severely when touched; two tufts are subdorsal, two lateral, and two spiracular. Food-plant, "*Maiten*," *Bromelia*, bramble, &c. Gregarious when young; a night-feeder; hides by day among dead leaves and rubbish near roots of food-plants; the young brood disperses as it grows older. Full-fed beginning of December."—*T. E.*

The two following new species are referable to the *Notodontide*; the larvæ were left in Chili to be reared, and the moths forwarded quite recently to Mr. Edmonds.

PSEUDOCERURA, n. g.

Allied to *Heterocampa*, but with the general aspect of *Cerura*; thorax very flat above, very coarsely scaled; collar very deep; basal hairy clothing of the abdomen represented by an appressed expanded tuft on each side; the abdomen itself rather short, tapering rather suddenly, almost to the extremity, strongly carinated along the dorsal line; anal tuft also carinated, slightly expanded; antennæ rather thick, with very short ciliæ along the anterior surface; legs rather long, thick, and coarsely scaled; primaries with nearly straight costal margin, with convex subangulated outer margin and slightly sinuous inner margin; secondaries subpyriform.

Pseudocerura thoracica, n. s.

Primaries above dark granite-grey, crossed by two widely-separated blackish-edged pale lines, undulated, reversed, and divergent towards the costa, enclosing the ordinary spots, which are as follows: "orbicular" rounded, pale buff, with a black central dot and black margin; "reniform" subquadrate, slightly constricted in the centre, buff, with black margin; a diffused buff crescent, with black lower edge below the "orbicular" spot; base, costal border, and external area buff, spotted with grey and dotted with black; a dentated blackish submarginal line, followed by an almost marginal series of well-defined small spots; secondaries sericeous-white, greyish on abdominal area; a grey spot at end of cell, and a marginal series of black lunules: thorax clothed with green-tipped white scales, giving it a pale green colour; abdomen greyish brown, with whitish anal tuft; under surface sericeous-white; wings with intense black marginal spots; primaries irrorated with blackish scales, and with a black subapical diffused patch; costal border alternately ferruginous and white; a blackish spot with an oblique blackish dash above it at the end of the cell; fringe spotted with blackish; secondaries with blackish basi-costal area; a spot in the cell and a second at the end of the cell black; an arched discal series of short slender grey lunules; front of pectus blackish; venter slightly greyish; expanse of wings, 41 mm.

"*Larva* found September 21st, on 'Boldu'; entirely pale yellowish green, almost transparent, and covered sparsely with minute yellow dots; head shiny; dorsal, subdorsal, and spiracular lines pale yellow; a pointed hump on the twelfth segment; a yellow oblique line extending from the point to near the spiracular line on each side; sixteen legs. When alarmed it throws back its head until it touches the centre of its back."—*T. E.*

EDMONDSIA, n. g.

Allied to *Lophopteryx*, but with broad *Noctuid* wings, with deeply undulated outer margins similar to those of *Calicula* and *Sypna* of the Old World; the inner margin of the primaries with a subbasal lobe of long projecting scales; body very robust, coarsely scaled; antennæ rather short, thick (especially in the male), flattened, with the anterior surface slightly but scarcely perceptibly setose.

Edmondsia synnoides, n. s.

Primaries above smoky brown, with the costal border, discoidal cell, and veins broadly sericeous greyish black; two zigzag velvet-black parallel lines across the basal third, and two more acutely zigzag across the disc; "reniform" spot indicated by a small patch of pale brown scales in the female, but wanting in the male: a submarginal series of black-bordered pale-brown lunate spots, most distinct in the female; fringe blackish, traversed by two paler undulated lines; secondaries smoky brown, with the basal two-fifths sordid-white; fringe as in primaries; a marginal series of pale-edged black lunules most distinct in the female; the latter sex also shows three divergent abbreviated black lines running from the external half of the abdominal margin to about the centre of the disc; thorax dull velvet-black; abdomen pale brown at the sides, blackish in the middle; wings below sericeous smoky brown, crossed beyond the middle by two arched ill-defined darker stripes; outer margin slightly paler; fringe grey, with a blue-black external edge; primaries with white internal border; secondaries pale towards the base, and with a small black spot at the end of the cell; body below dull black; tarsi banded with white. Expanse of wings—male 47 mm., female 58 mm.



Larva of *Edmondsia synnoides*, Butl.

Larva.—Velvet-black, minutely speckled with white; head rather small and shiny; second segment also small; third segment very full and large, with two large quadrate yellowish spots in front, and with two long black divergent tapering subdorsal horns, filiform at their extremities; the fourth to sixth segments, which are also very full, with a yellowish dorsal patch; the second

to fifth segments with yellow instead of white speckling at the sides ; a broad lateral undulated creamy white band from the fifth to the twelfth segment, upon which are the spiracles, which are small and black ; the twelfth segment with two slightly divergent tapering thorn-like subdorsal horns ; legs, claspers, and under surface slightly greyish.

I have taken this description from a coloured drawing of the larva ; as, after looking over all the notes in my possession, I have failed to recognise any description applicable to the species.